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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/715,681	11/17/2000	Yoav Raz	EMS-00202	4765

26339	7590	11/30/2004

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EXAMINER
DADA, BEEMNET W

ART UNIT	PAPER NUMBER
2135	

DATE MAILED: 11/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 June 2004*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-7,22-28 and 41-52* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-7, 22-28 and 41-52* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1, 22, and 41 have been amended, claims 8-21, 29-40 and 53-62 have been

cancelled on an amendment filed on 6/14/2004. Claims 1-7, 22-28 and 41-52 are pending.

Response to Arguments

2.   Applicant's arguments filed 6/14/04 have been fully considered but they are not

persuasive. With respect to claim 1, Applicant argues that the cited reference (Waldin et al. US

6,094,731) does not teach the features of claim 1 as amended which includes determining

physical portions of a storage device that has been modified since a previous virus scan using

information about the physical portions that is independent of the file structure, file system, and

file types. The examiner respectfully disagrees.

Waldin et al. teaches scanning file sectors (files are divided into sectors and stored in

memory) and storing a hash value of scanned file sectors [column 2, lines 10-14], and

determining sectors of the stored file that has been modified since a previous virus scan

[column 6, lines 37-47], and scanning the file sectors for viruses [column 6, lines 37-47]. Further

Waldin et al. teaches scanning for viruses regardless of the content of the sectors [column 7,

line 64 – column 8, line 8] and regardless of the file format [column 3, lines 40-45].

As discussed above, determination of modification of file sectors and scanning for

viruses is performed regardless of the file format, but according to matching pre-stored hash

values for a sector which is independent of file structure (for example independent of location of

the file), file system (for example independent of operating systems structure, in which files are

named) and file types (for example independent of file name) according to Microsoft Computer

Dictionary, definition of file structure, file system and file type.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States
> only if the international application designated the United States and was published under Article 21(2)
> of such treaty in the English language.

4.   Claims 1-4, 22-25, 41-44 and 46-52 are rejected under 35 U.S.C. 102(e) as being

anticipated by Waldin et al. (hereinafter referred to as Waldin) (U.S. Patent No. 6,094,731).

5.   As per claim 1, Waldin teaches a method of scanning a storage device for viruses,

comprising:

        determining physical portions of the storage device that have been modified since a

previous virus scan using information about the physical portions that is independent of the file

structure, file system, and file types (note that determination of modification of file sectors is

performed according to matching pre-stored hash values for a sector) [column 2, lines 57-64

column 6, lines 37-47, column 7, line 64 – column 8, line 8 and column 3, lines 40-45]; and

        scanning at least parts of the physical portions for viruses, wherein scanning is

independent of the file structure, file system and file types (scanning for viruses is performed

regardless of the file format, but according to matching pre-stored hash values for a sector which is independent of location, format or name of the file) [column 6, lines 43-46 ,column 7, lines 37-46, column 7, line 64 – column 8, line 8 and column 3, lines 40-45].

6.   As per claim 41, Waldin teaches an anti-virus unit comprising:

means for coupling to at least one storage device [column 3, lines 47-55];

means for determining physical portions of the storage device that have been modified since a previous virus scan that is independent of the file structure, file system, and file types (note that determination of modification of file sectors is performed according to matching pre-stored hash values for a sector) [column 2, lines 57-64 column 6, lines 37-47, column 7, line 64 – column 8, line 8 and column 3, lines 40-45]; and

means for scanning at least parts of the physical portions for viruses wherein scanning is independent of the file structure, file system and file types (scanning for viruses is performed regardless of the file format, but according to matching pre-stored hash values for a sector which is independent of location, format or name of the file) [column 6, lines 43-46 ,column 7, lines 37-46, column 7, line 64 – column 8, line 8 and column 3, lines 40-45].

7.   As per claims 2 and 42, Waldin teaches the method as applied above. Furthermore, Waldin teaches the method, wherein the physical portions correspond to tracks (sectors) of the storage device [column 4, lines 4-8 and figure 1].

8.   As per claims 3 and 43, Waldin teaches teaches the method as applied above. Furthermore, Waldin teaches the method, wherein the physical portions correspond to sectors of the storage device [column 4, lines 4-8 and figure 1].

9.   As per claims 4 and 44, Waldin teaches the method as applied above. Furthermore,

Waldin teaches the method, wherein the physical portions correspond to sub-portions of the

storage device [column 4, lines 4-8 and figure 1].

10.   As per claims 46, 51 and 52 Waldin teaches the method as applied above. Furthermore,

Waldin teaches the method, wherein said means for coupling includes means for coupling to

only one storage device [column 3, lines 47-55].

11.   As per claims 47-50, Waldin teaches the method as applied above. Furthermore, Waldin

teaches the method, wherein said means for coupling includes means for coupling to more than

one storage device [column 8, lines 20-30].

12.   As per claims 22-25, the claimed steps correspond to the functions of the elements of

the method claims 1-4, which has been rejected above and thus rejected with the same reason

applied thereto.

Claim Rejections - 35 USC § 103

13.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

14.   Claims 5-7, 26-28 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Waldin et al. (U.S. Patent No. 6,094,731).

15.   As per claims 5 and 45, Waldin teaches the method as applied above. Furthermore,

Waldin teaches creating a table that is indexed according to each of the portions [fig 1, unit 10

and column 4, lines 4-8]. Waldin also teaches scanning for viruses when it has been determined

that portions have been modified [column 4, lines 9-12], and calculating a new hash value upon

determination of a modification [column 4, lines 58-60]. However Waldin does not explicitly

teach setting a specific one of entries subject to a write operation. It would have been obvious to

one having ordinary skill in the art at the time the invention was made to include a method of

setting a specific one of entries subject to a write operation. This would have been obvious

because Waldin teaches placing identification numbers into sectors that is scanned, every time

a sector is read [column 4, lines 52-58]. Based on this teachings it would have been obvious to

one having ordinary skill in the art at the time the invention was made to include a method of

setting a specific one of entries subject to a write operation into the indexed sector table thought

by Waldin.

16.   As per claims 6 and 7, Waldin teaches the method as applied to claim 5 above.

Furthermore Waldin teaches method, wherein creating the table includes copying another table

provided by the storage device [column 3, lines 50-55, figure 1, originating and recipient

computers].

17.   As per claims 26-28, the claimed steps correspond to the functions of the elements of

the method claims 5-7, which has been rejected above and thus rejected with the same reason

applied thereto.

Conclusion

18.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy

as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date
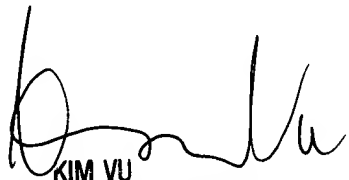
of this final action.

Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Beemnet W Dada whose telephone number is (571) 272-3847. The

examiner can normally be reached on Monday - Friday (9:00 am - 5:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Kim Y Vu can be reached on (571) 272-3859. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private

PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Beemnet Dada

November 20, 2004

KIM VU
SUPERVISORY PATENT EXAMIN
TECHNOLOGY CENTER 2